ABB BALDOR RELIANCE

Customer information packet

IDWNM3707T

5HP, 1770RPM, 3PH, 60HZ, 213TC, 3734M, TENV, F1
Class - None
Division - Not Applicable

Copyright © All product information within this document is subject to ABB Motors and Mechanical Inc. copyright © protection, unless otherwise noted.
11/3/2026 6:53:58 AM

Specifications

Enclosure	TENV
Frame	213TC
Frame Material	Steel
Frequency	60.00 Hz
Haz Area Class and Group	None
Haz Area Division	Not Applicable
Motor Letter Type	Three Phase
Output @ Frequency	5.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	230.0 V @ 60 HZ
	460.0 V @ 60 HZ
Agency Approvals	CSA
	UR
Ambient Temperature	40 °C
Auxiliary Box	NO AUXILLARY BOX
Auxiliary Box Lead Termination	None
Base Indicator	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Blower	None
Current @ Voltage	6.200 A @ 460.0 V
	12.400 A @ 230.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	89.5 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	6.2 a
Insulation Class	H

Part Detail

Revision	C
Type	AC
Mech. spec.	37H312
Base	
Status	PRD/A
Elec. spec.	37WGR177
Layout	37LYH312
Eff. date	12-03-2025
CD Diagram	CD0005
Poles	04
Leads	9#14
Proprietary	False
Created date	11-19-2020

Inverter Code	Inverter Duty
KVA Code	J
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Max Speed	4000 rpm
Motor Lead Quantity/Wire Size	9 @ 14 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3734M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	19.84 IN
Power Factor	82
Product Family	Wash Down
Pulley End Bearing Type	Sealed Bearing
Pulley Face Code	C-Face
Pulley Shaft Indicator	Standard
Rodent Screen	None
Service Factor	1.00
Shaft Diameter	1.375 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	Shaft Slinger
Speed	1770 rpm
Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Bearing	None
Thermal Device - Winding	Normally Closed Thermostat
Vibration Sensor Indicator	No Vibration Sensor
Winding Thermal 1	None
Winding Thermal 2	None

Nameplate

NP1608L									
CAT NO	IDWNM3707T								
SPEC.	37H312R177G1								
FRAME	213TC		**HP**	5 TE					
VOLTS	230/460								
MAG CUR	5.8/2.9			**FLA**	12.4/6.2				
RPM	1770			**RPM MAX**	4000				
HZ	60	**PH**	3		**CLASS**	H			
SER.F.	1.00	**DES**	B		**SL HZ**	1.2			
NEMA-NOM-EFF	89.5	**WK2**	0.836						
BLWR V		**PH**		**HZ**		**A**			
RATING	40C AMB-CONT								
DE BRG	6307		**ODE BRG**	6206					
CC	010A	**SN**							

AC Induction Motor Performance Data
Record # 85505
Typical performance - not guaranteed values

Winding: 37WGR177-R007	**Type:** 3734M	**Enclosure:** TENV

Nameplate Data				**460 V, 60 Hz: High Voltage Connection**	
Rated Output (HP)			5	**Full Load Torque**	14.76 LB-FT
Volts			230/460	**Start Configuration**	direct on line
Full Load Amps			12.4/6.2	**Breakdown Torque**	47.48 LB-FT
R.P.M.			1770	**Pull-up Torque**	22.38 LB-FT
Hz	60	**Phase**	3	**Locked-rotor Torque**	28.3 LB-FT
NEMA Design Code	B	**KVA Code**	J	**Starting Current**	49.16 A
Service Factor (S.F.)			1	**No-load Current**	2.83 A
NEMA Nom. Eff.	89.5	**Power Factor**	82	**Line-line Res. @ 25ºC**	2.12 Ω
Rating - Duty			40C AMB-CONT	**Temp. Rise @ Rated Load**	56°C
				Locked-rotor Power Factor	37.5
				Rotor inertia	0.836 lb-ft²

Load Characteristics 460 V, 60 Hz, 5 HP

% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**
Power Factor	41	64	77	83	85	85
Efficiency	86.4	90.8	91.4	91.3	90.7	89.3
Speed	1793	1787	1779	1772	1762	1753
Line amperes	3.28	3.99	5	6.18	7.6	9.19

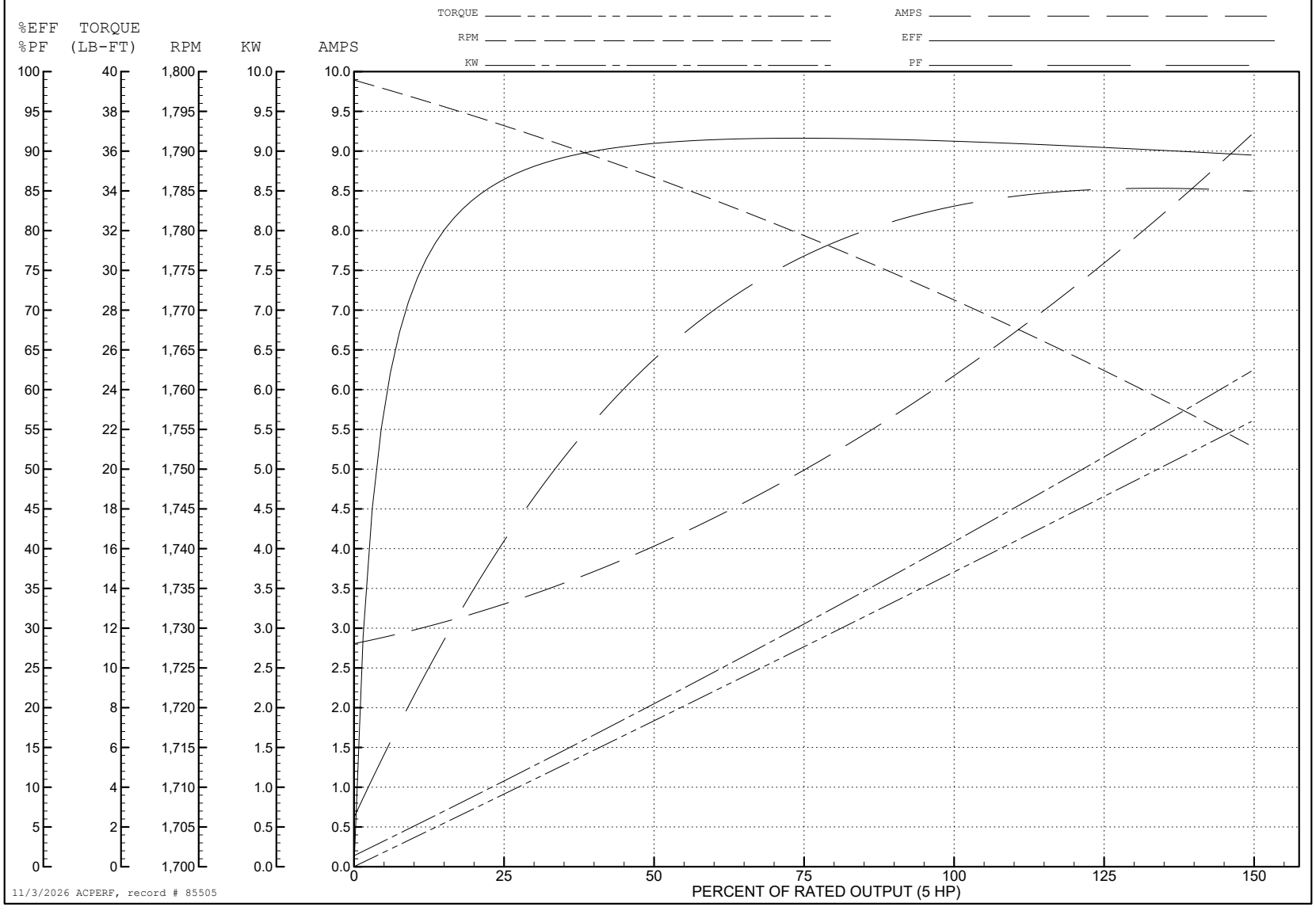
ABB Motors and Mechanical Inc.

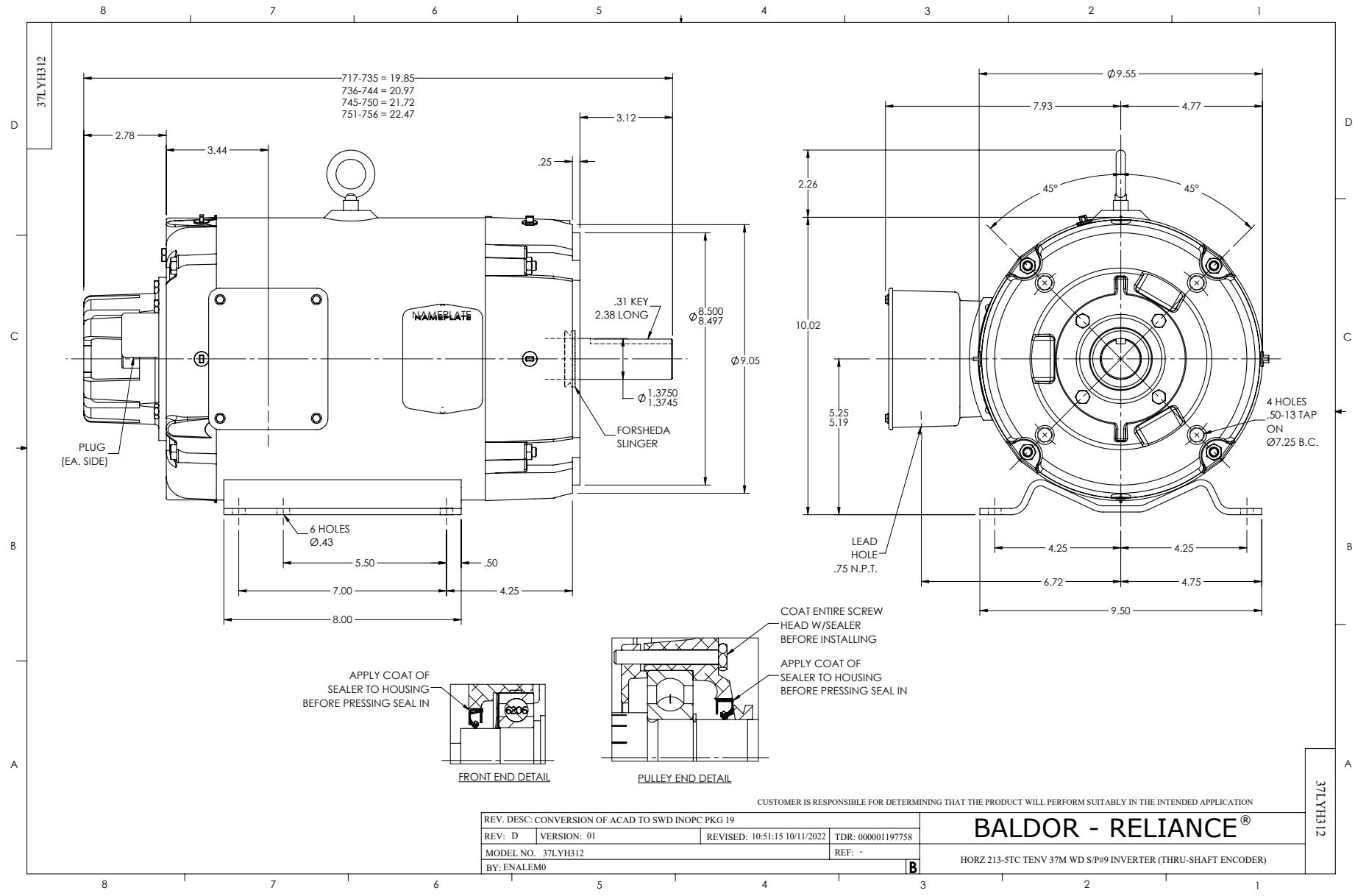
WINDING # 37WGR177

5 HP 3 PH 60 HZ 1770 RPM 460 V 3734M

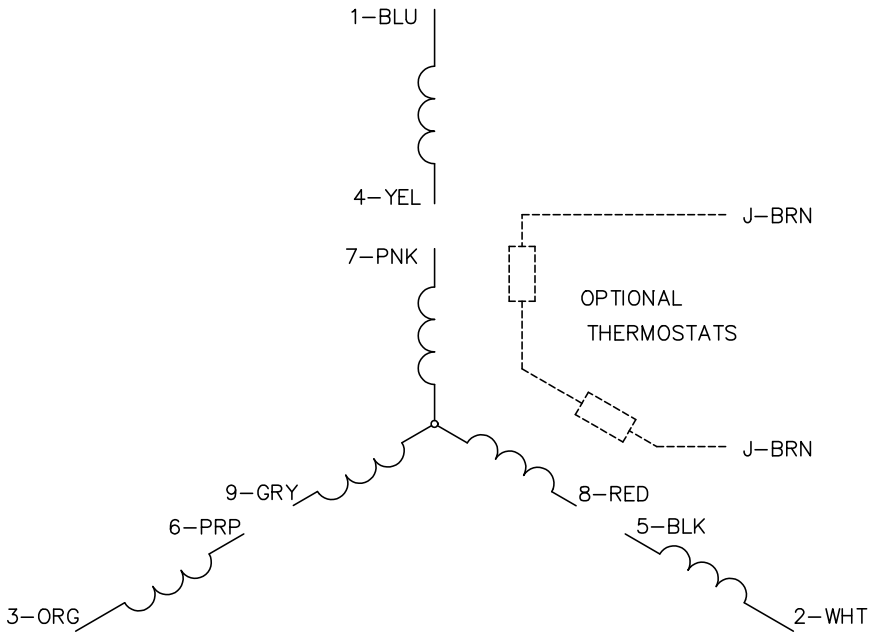
Typical performance - not guaranteed values.

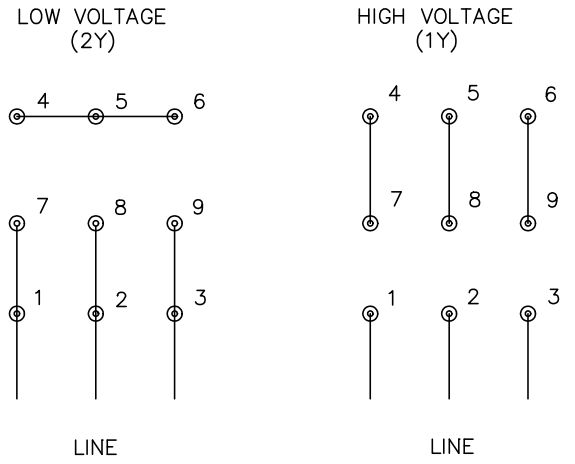
TORQUES(LB-FT): PO=47.48 PU=22.38 LR=28.3 LRA=49.16




37LYH312
717-735 = 19.85
736-744 = 20.97
745-750 = 21.72
751-756 = 22.47
2.78
3.44
3.12
.25
NAMEPLATE
.31 KEY
2.38 LONG
Ø8.500
Ø8.497
Ø9.05
Ø1.3750
Ø1.3745
FORSHEDA
SLINGER
PLUG
(EA. SIDE)
6 HOLES
Ø.43
5.50
.50
7.00
4.25
8.00
Ø9.55
7.93
4.77
2.26
45°
45°
10.02
5.25
5.19
4 HOLES
.50-13 TAP
ON
Ø7.25 B.C.
LEAD
HOLE
.75 N.P.T.
4.25
4.25
6.72
4.75
9.50
COAT ENTIRE SCREW
HEAD W/SEALER
BEFORE INSTALLING
APPLY COAT OF
SEALER TO HOUSING
BEFORE PRESSING SEAL IN
APPLY COAT OF
SEALER TO HOUSING
BEFORE PRESSING SEAL IN
FRONT END DETAIL
PULLEY END DETAIL
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT THE PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION
REV. DESC: CONVERSION OF ACAD TO SWD INOPC PKG 19
REV: D
VERSION: 01
REVISED: 10:51:15 10/11/2022
TDR: 000001197758
MODEL NO. 37LYH312
REF: -
BY: ENALEM0
B
BALDOR - RELIANCE®
HORZ 213-5TC TENV 37M WD S/P#9 INVERTER (THRU-SHAFT ENCODER)
37LYH312

CD0005





NOTES:

1. INTERCHANGE ANY TWO LINE LEADS TO REVERSE ROTATION.
2. OPTIONAL THERMOSTATS ARE PROVIDED WHEN SPECIFIED.
3. ACTUAL NUMBER OF INTERNAL PARALLEL CIRCUITS MAY BE A MULTIPLE OF THOSE SHOWN ABOVE.
4. LEAD COLORS ARE OPTIONAL. LEADS MUST ALWAYS BE NUMBERED AS SHOWN.

CD0005

REV. DESC: REVISE TO SHOW OPTIONAL COLORS			BALDOR ELECTRIC Co.
REV. LTR: E	BY: JLP	REVISED: 01/19/99 10:15	TDR: 0171435
CD0005		FILE: AAA00005140	MDL: –
		MTL: –	3PH, DV, 9 LEADS